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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,402	12/21/2001	Yen-Kuang Chen	42390.P12636	3633

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EXAMINER

PARSONS, CHARLES E

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,402

Applicant(s)

CHEN ET AL.

Examiner

Charles E Parsons

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09292003</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li PN 6275531 in view of Iizuka PN 5767910.

Claim 1, 8, 11, 16, 18: A method comprising:

providing a data set including an ordered matrix of coefficients; (See Li column 5 line 34-35 the presence of a DCT implies an ordered matrix.)

converting the rearranged data set into a coded data set. (See Li figure 1, the outputs of items 40 and 30 are encoded data.)

scanning and rearranging the ordered matrix of coefficients of the data set in memory with a non-raster order scan; and (While Li is silent as to how his DCT coefficients are generated Iizuka isn't, See Iizuka figure 1 items 402 and 409 as well as figure 2 and 3 in addition to column 4 lines 54-58, a zig zag scan is a non raster order scan. At the time the invention was made it was well known to those of ordinary skill in the art the DCT coefficients are non-raster scanned or zig zag scanned because they produce a longer run of zero's thus optimizing compression. See Li column 2 lines 7-12. Therefore it would have been obvious to one of ordinary skill in the art, to non-raster scan or zig zag scan the DCT coefficients in order to make the invention as claimed, motivated by Li's teaching cited above that it optimizes compression of video data.)

Art Unit: 2613

Claim 2, 9, 11, 16, 18: The method of claim 1, wherein converting the rearranged data set into a coded data set further comprises performing bit plane extraction on the rearranged data set in memory. (See Li figures 1 and 6, according to applicants specification, the term bit plane extraction means creating base and enhancement layers.)

Claim 11 is further limited to and quantize the rearranged data set by discarding a subset of the rearranged data set. (See lizuka figure 1 item 407 quantizers discard the high frequency coefficients.) Official notice served

Claim 3, 12, 20. The method of claim 2, further comprising the step of storing the rearranged data set in a memory buffer before performing the bit plane extraction step. (See lizuka figure 1 items 403a and 404a)

Claim 4, 10, 13, 17, 21: The method of claim 1, wherein the data set is visual information. (See lizuka figure 1 and Li figure 1 both inventions are dealing with video data which is visual.)

Claim 5, 13: The method of claim 4, wherein the visual information is encoded with a progressive encoder to create a base layer and at least one enhancement layer. (See Li figure 1 items 30 and 40.)

Claim 6, 10, 14, 17, 19: The method of claim 1, further comprising the step of encoding visual data using transform coding to create the ordered matrix of coefficients. (See lizuka item 402 a DCT is a transform.)

Claim 7. The method of claim 6, further comprising the step of providing a discrete cosine transform to create the ordered matrix of coefficients. (See lizuka item 402.)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Parsons whose telephone number is 703-305-3862. The examiner can normally be reached on M-TH 7AM to 5 PM.

Art Unit: 2613

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CEP


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